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Steven R. Willis

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EXAMINER

WILSON, ROBERT W

ART UNIT

PAPER NUMBER

2475

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12/15/2009

PAPER

Please find below and/or attached an Office communication concerning this application or proceeding.

The time period for reply, if any, is set in the attached communication.

Office Action Summary	Application No. 10/665,349	Applicant(s) WILLIS ET AL.	
	Examiner ROBERT W. WILSON	Art Unit 2475	

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

- 1) ☒ Responsive to communication(s) filed on 8/31/09.
- 2a) ☐ This action is **FINAL**. 2b) ☒ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

- 4) ☒ Claim(s) 46-69 is/are pending in the application.
- 4a) Of the above claim(s) _____ is/are withdrawn from consideration.
- 5) ☐ Claim(s) _____ is/are allowed.
- 6) ☒ Claim(s) 46-69 is/are rejected.
- 7) ☐ Claim(s) _____ is/are objected to.
- 8) ☐ Claim(s) _____ are subject to restriction and/or election requirement.

Application Papers

- 9) ☒ The specification is objected to by the Examiner.
- 10) ☒ The drawing(s) filed on 9/22/03 is/are: a) ☐ accepted or b) ☒ objected to by the Examiner.
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

Priority under 35 U.S.C. § 119

- 12) ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☐ All b) ☐ Some * c) ☐ None of:
1. ☐ Certified copies of the priority documents have been received.
 2. ☐ Certified copies of the priority documents have been received in Application No. _____.
 3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

* See the attached detailed Office action for a list of the certified copies not received.

Attachment(s)

- | | |
|--|---|
| 1) <input checked="" type="checkbox"/> Notice of References Cited (PTO-892) | 4) <input type="checkbox"/> Interview Summary (PTO-413) |
| 2) <input type="checkbox"/> Notice of Draftsperson's Patent Drawing Review (PTO-948) | Paper No(s)/Mail Date. _____ |
| 3) <input checked="" type="checkbox"/> Information Disclosure Statement(s) (PTO/SB/08) | 5) <input type="checkbox"/> Notice of Informal Patent Application |
| Paper No(s)/Mail Date <u>6/29/09 & 6/8/09</u> . | 6) <input type="checkbox"/> Other: _____ |

DETAILED ACTION

Priority

1. The later-filed application must be an application for a patent for an invention which is also disclosed in the prior application (the parent or original nonprovisional application or provisional application). The disclosure of the invention in the parent application and in the later-filed application must be sufficient to comply with the requirements of the first paragraph of 35 U.S.C. 112. See *Transco Products, Inc. v. Performance Contracting, Inc.*, 38 F.3d 551, 32 USPQ2d 1077 (Fed. Cir. 1994). The disclosure of the prior-filed application, Application No. 60/090,028, fails to provide adequate support or enablement in the manner provided by the first paragraph of 35 U.S.C. 112 for one or more claims of this application. This application is a division of application no.: 09/335,947 which is now U.S. Patent No.: 6,658,021. Application no.: 09/335,947 now U.S. Patent No.: 6,658,091 claims priority back to provisional application no.: 60/090,028 which is dated June 19, 1998. The provisional application no.: 60/090,028 shows data structures for PPP over SONET or packet over SONET, ATM over SONET, and Line cards but never provides link sending or receiving channelized data tributary streams which carry both Packet over SONET and ATM over SONET in tributary streams together simultaneously. According claims 46-69 are not entitled to the benefit of the filing date of the provisional date which is June 19, 1998. but to the filling date of this application which is 9/22/03. In fact the applicant claims that this application is a division of application 09/335,947 which is U.S. Patent No.: 6,658,021; however, an amendment was made to the specification on 9/22/03. The amendment gives an overview of the invention which was not described in application 09/335,947 so this application is not a division but in essence a CIP.

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Claim Rejections - 35 USC § 103

2. The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

3. Claims 46, 53, & 59 are rejected under 35 U.S.C. 103(a) as being unpatentable over Pierson (U.S. Patent No.: 6,487,198) in view of Noh (U.S. Patent No.: 6,134,238)

Referring to claim 46, Pierson teaches: A device (Figure 6)

a demultiplexer configured to receive a synchronous optical network (SONET) data stream and separate SONET data stream into packet over SONET data stream and asynchronous transfer mode (ATM) data stream (SONET receiver per Fig 6 demultiplexes the synchronous optical data stream (601) into ATM cells which carries both DSOs and HDLC or ATM over SONET and packet over SONET simultaneously per col. 10 lines 33 to col. 12 lines 49. Please note that HDLC is described in detail per col. 12 lines 29 to 49) and a line card coupled to the demultiplexer (port on SONET receiver is interpreted as a line card per Fig 6)

Pierson does not expressly call for: separate the channelized synchronous optical data stream into a constituent tributary data stream and configured to provide the demultiplex with the channelized SONET data stream

Noh teaches: separate the channelized synchronous optical data stream into a constituent tributary data stream (SONET data stream is separated into a tributary which carried the ATM cell per col. 5 lines 65 to col. 6 line 19 and col. 6 line 63 to col. 7 line 5)

It would have been obvious to one of ordinary skill in the art at the time of the invention to add the separate the channelized synchronous optical data stream into a constituent tributary data stream and configured to provide the demultiplex with the channelized SONET data stream of Noh to the processing performed by the SONET Receiver of Pierson because by processing ATM cells with in VC the bandwidth utilized in transmitting and receiving the data is more efficiently utilized which will result in an improved performance.

Referring to claim 53, Pierson teaches: one or more devices in a data processing environment (Fig 6 is the device) comprising:

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A multiplexer configured to simultaneously received a packet over synchronous optical network (POS) data stream and a asynchronous transfer mode data stream (The SONET transmitter or multiplexer simultaneously receives an ATM cell which has two T1s comprising both DSOs and HDLC or both packet over SONET and ATM over SONET per Fig 6 and per col. 12 lines 50-67. It should be noted that HDLC is in slot 24 which is also sent per col. 12 lines 33 to 44)

And a line card coupled to the multiplexer and configure to receive the single channelized SONET data stream (A port on the SONET receiver is the line card which receives a single channelized SONET data stream per Fig 6 and per col. 12 lines 50-67)

Pierson does not expressly call for: combine the simultaneously received data streams into a single channelized synchronous optical network (SONET) data stream

Noh teaches: combine the simultaneously received data streams into a single channelized synchronous optical network (SONET) data stream (Fig 7A shows three VC3 or tributary streams which are simultaneously concatenated to create a single STM-1 or SONET single data stream per col. 6 lines 20 to 62 and col. 5 lie 54 to col. 6 line 19)

It would have been obvious to one of ordinary skill in the art at the time of the invention to add combine the simultaneously received data streams into a single channelized synchronous optical network (SONET) data stream of Noh to the processing of SONET transmitter of Pierson because by processing ATM cells with in VC the bandwidth utilized in transmitting and receiving the data is more efficiently utilized which will result in an improved performance

Referring to claim 59, Pierson teaches: forwarding node for directing data in a network (Figure 6) the forwarding node including:

A means for creating single synchronous optical network data stream including a packet over synchronous optical data stream and an asynchronous transfer mode (ATM) tributary data stream (SONET transmitter per Fig 6 creates a single SONET data stream including data in atm cell over SONET and HDLC in ATM cell over SONET or packet over SONET pr col. 12 lines 50 to 67 and per col. 12 lines 33 to 44)

Means for transmitting a single SONET data stream (SONET transmitter per Fig 6 and col. 12 lines 50-67)

Pierson does not expressly call for: at least two simultaneous tributary streams in a single SONET data stream

Noh teaches: at least two simultaneous tributary streams in a single SONET data stream (Fig 7A shows three VC3 or tributary streams which are simultaneously concatenated to create a single STM-1 or SONET single data stream per col. 6 lines 20 to 62 and col. 5 lie 54 to col. 6 line 19)

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It would have been obvious to one of ordinary skill in the art at the time of the invention to add at least two simultaneous tributary streams of Noh to the processing of SONET transmitter of Pierson because by processing ATM cells with in VC the bandwidth utilized in transmitting and receiving the data is more efficiently utilized which will result in an improved performance. Combining the at least two simultaneous tributary streams in to the SONET transmitter would result in having a means for transmitting at least two simultaneous tributary streams which include both packet over SONET and ATM over SONET and would also result in the transmitting means for transmitting at least two simultaneous tributary SONET data streams in a single SONET data stream.

4. Claim 47 is rejected under 35 U.S.C. 103(a) as being unpatentable over Pierson (U.S. Patent No.: 6,487,198) in view of Noh (U.S. Patent No.: 6,134,238) further in view of Kremer (U.S. Patent No.: 5,278,824)

Referring to claim 47, the combination of Pierson and Noh teach: the device of claim 46 and receiving channelized SONET data stream

The combination of Pierson and Noh do not expressly call for: a single optical fiber

Kremer teaches: single optical fiber (col. 2 lines 39 to 67)

It would have been obvious to one of ordinary skill in the art at the time of the invention to add the single optical fiber of Kremer to the device of the combination of Pierson and Noh in order to receive SONET signal from another node.

5. Claims 48, 54, & 60 are rejected under 35 U.S.C. 103(a) as being unpatentable over Pierson (U.S. Patent No.: 6,487,198) in view of Noh (U.S. Patent No.: 6,134,238) further in view of Vogel (U.S. Patent No.: 6,075,788)

Referring to claim 48, the combination of Pierson and Noh teach: the device of claim 46 and wherein the tributary data stream additionally include a DS tributary stream (T1 is in the data stream)

The combination of Pierson and Noh does not expressly call for: PPP

Vogel teaches: PPP (PPP frames in ATM cells in SONET per col. 2 lines 2)

It would have been obvious to one of ordinary skill in the art at the time of the invention to add the PPP of Vogel to within the ATM cells of Pierson and Noh in order to improve the performance of sending ATM cells

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Referring to claim 54, the combination of Pierson and Noh teach: the one or more devices of claim 53 and simultaneously receiving tributary streams including DS tributary data

The combination of Pierson and Noh do not expressly call for: PPP

Vogel teaches: PPP (PPP frames in ATM cells in SONET per col. 2 lines 2)

It would have been obvious to one of ordinary skill in the art at the time of the invention to add the PPP of Vogel to within the ATM cells which constitute DS tributary data of Pierson and Noh in order to improve the performance of sending ATM cells

Referring to claim 60, the combination of Pierson and Noh teach: the forwarding node of claim 59 and wherein the at least two simultaneous tributary streams additionally include a DS tributary data stream

The combination of Pierson and Noh do not expressly call for: PPP

Vogel teaches: PPP (PPP frames in ATM cells in SONET per col. 2 lines 2)

It would have been obvious to one of ordinary skill in the art at the time of the invention to add the PPP of Vogel to within the ATM cells which constitute DS tributary data of Pierson and Noh in order to improve the performance of sending ATM cells

6. Claims 49-53, 55-58 are rejected under 35 U.S.C. 103(a) as being unpatentable over

Pierson (U.S. Patent No.: 6,487,198) in view of Noh (U.S. Patent No.: 6,134,238) further in view of further in view of Schmidt (U.S. Patent No.: 6,205,154)

Referring to claim 49, the combination of Pierson and Noh teach: the device of claim 46 and SONET data stream

The combination of Pierson and Noh does not expressly call for: optical carry rate in accordance with the SONET standard.

Schmidt teaches: optical carry rate in accordance with the SONET standard per col. 3 lines 34 to 67

It would have been obvious to add the optical carry rate of the SONET standard Schmidt to the SONET of the combination of Pierson and Noh in order to be standards compliant and build a system which is inoperable with legacy SONET systems.

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Referring to claim 50, the combination of Pierson and Noh teach: the device of claim 46 and POS tributary data streams

The combination of Pierson and Noh does not expressly call for: optical carry rate in accordance with the SONET standard.

Schmidt teaches: optical carry rate in accordance with the SONET standard per col. 3 lines 34 to 67

It would have been obvious to add the optical carry rate of the SONET standard of Schmidt to the to the POS tributary data of the combination of Pierson and Noh in order to be standards compliant and build a system which is inoperable with legacy SONET systems.

Referring to claim 51, the combination of Pierson and Noh teach: the device of claim 46 and ATM tributary data streams

The combination of Pierson and Noh do not expressly call for: optical carry rate in accordance with the SONET standard.

Schmidt teaches: optical carry rate in accordance with the SONET standard per col. 3 lines 34 to 67

It would have been obvious to add the optical carry rate of the SONET standard Schmidt to the to the ATM tributary data stream of the combination of Pierson and Noh in order to be standards compliant and build a system which is inoperable with legacy SONET systems.

In addition Pierson teaches:

Regarding claim 52, wherein the tributary data streams additionally include a composite tributary stream that includes a POS tributary data stream and ATM data stream (The reference teaches ATM cells which had both HDLC and DS) or a composite in the same SONET stream or a composite tributary per col. 10 lines 33 to col. 12 lines 49. & per col. 12 lines 29 to 49

Referring to claim 55, the combination of Pierson and Noh teach: the on e or more devices of claim 53 and channelized SONET data stream

The combination of Pierson and Noh does not expressly call for: optical carry rate in accordance with the SONET standard.

Schmidt teaches: optical carry rate in accordance with the SONET standard per col. 3 lines 34 to 67

It would have been obvious to add the optical carry rate of the SONET standard Schmidt to the channelized SONET data stream of the combination of Pierson and Noh in order to be standards compliant and build a system which is inoperable with legacy SONET systems.

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Referring to claim 56, the combination of Pierson and Noh teach: the one or more devices of claim 53 and POS tributary data streams

The combination of Pierson and Noh does not expressly call for: optical carry rate in accordance with the SONET standard.

Schmidt teaches: optical carry rate in accordance with the SONET standard per col. 3 lines 34 to 67

It would have been obvious to add the optical carry rate of the SONET standard of Schmidt to the to the POS tributary data of the combination of Pierson and Noh in order to be standards compliant and build a system which is inoperable with legacy SONET systems.

Referring to claim 57, the combination of Pierson and Noh teach: the one or more devices of claim 53 and ATM tributary data streams

The combination of Pierson and Noh do not expressly call for: optical carry rate in accordance with the SONET standard.

Schmidt teaches: optical carry rate in accordance with the SONET standard per col. 3 lines 34 to 67

It would have been obvious to add the optical carry rate of the SONET standard Schmidt to the to the ATM tributary data stream of the combination of Pierson and Noh in order to be standards compliant and build a system which is inoperable with legacy SONET systems.

In addition Pierson teaches:

Regarding claim 58, wherein the simultaneously received tributary data streams additionally include a composite tributary stream that includes a POS tributary data stream and ATM data stream (The reference teaches ATM cells which had both HDLC and DS) or a composite in the same SONET stream or a composite tributary per col. 10 lines 33 to col. 12 lines 49. & per col. 12 lines 29 to 49

Referring to claim 61, the combination of Pierson and Noh teach: the forwarding node of claim 59 and single SONET data stream

The combination of Pierson and Noh does not expressly call for: optical carry rate in accordance with the SONET standard.

Schmidt teaches: optical carry rate in accordance with the SONET standard per col. 3 lines 34 to 67

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It would have been obvious to add the optical carry rate of the SONET standard Schmidt to the channelized SONET data stream of the combination of Pierson and Noh in order to be standards compliant and build a system which is inoperable with legacy SONET systems.

Referring to claim 62, the combination of Pierson and Noh teach: the forwarding node of claim 59 and POS tributary data streams

The combination of Pierson and Noh does not expressly call for: optical carry rate in accordance with the SONET standard.

Schmidt teaches: optical carry rate in accordance with the SONET standard per col. 3 lines 34 to 67

It would have been obvious to add the optical carry rate of the SONET standard of Schmidt to the to the POS tributary data of the combination of Pierson and Noh in order to be standards compliant and build a system which is inoperable with legacy SONET systems.

Referring to claim 63, the combination of Pierson and Noh teach: the forwarding node of claim 59 and ATM tributary data streams

The combination of Pierson and Noh do not expressly call for: optical carry rate in accordance with the SONET standard.

Schmidt teaches: optical carry rate in accordance with the SONET standard per col. 3 lines 34 to 67

It would have been obvious to add the optical carry rate of the SONET standard Schmidt to the to the ATM tributary data stream of the combination of Pierson and Noh in order to be standards compliant and build a system which is inoperable with legacy SONET systems.

In addition Pierson teaches:

Regarding claim 64, wherein the simultaneously received tributary data streams additionally include a composite tributary stream that includes a POS tributary data stream and ATM data stream (The reference teaches ATM cells which had both HDLC and DS) or a composite in the same SONET stream or a composite tributary per col. 10 lines 33 to col. 12 lines 49. & per col. 12 lines 29 to 49

7. Claim 65 is rejected under 35 U.S.C. 103(a) as being unpatentable over Pierson (U.S.

Patent No.: 6,487,198) in view of Stephenson(U.S. Patent No.: 5,081,654)

Referring to claim 65, Pierson teaches: a method for transmitting information over a fiber optic cable (Fig 6 performs the method) the method comprising:

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Constructing a packet over synchronous optical network (POS) data stream (ATM transmitter per Fig 6 takes T1s which have HDLC channels and inserts as part of the T1 into an ATM cell. The SONET transmitter per Fig 6 inserts the HDLC in ATM cell into SONET per col. 12 lines 50-67. Please refer to details associated with HDLC per col. 12 lines 33 to 44)

Constructing an asynchronous transfer mode (ATM) data stream (ATM transmitter per Fig 6 takes T1s which have DSO and inserts into an ATM cell. The SONET transmitter inserts the ATM cell into SONET per col. 12 lines 50-67)

Combining the POS data stream and the ATM data stream into a single payload of synchronous optical data stream (An ATM cell with T1 data and HDLC data which is both POS and ATM are inserted into SONET per col. 12 lines 50-67. The ATM cells are mapped to payloads per col. 2 lines 36 to 40)

Transmitting the single SONET data stream (The ATM transmitter transmits the single SONET stream per col. 12 lines 50-67)

Pierson does not teach: single channelized synchronous optical data

Stephenson teaches: single channelized synchronous optical data (One channel of SONET data per Fig 1 and per col. 4 lines 11 to 21)

It would have been obvious to one of ordinary skill in the art at the time of the invention to add the single channelized synchronous optical data of Schmidt to the combined POS and ATM single data stream of Pierson in order to send the data in a standards based format in order to be interoperable with standards based system.

8. Claim 66 is rejected under 35 U.S.C. 103(a) as being unpatentable over Pierson (U.S.

Patent No.: 6,487,198) in view of Stephenson (U.S. Patent No.: 5,081,654) further in view of

Kremer (U.S. Patent No.: 5,278,824)

Referring to claim 66, the combination of Pierson and Stephenson teach: the method of claim 65 and wherein the single SONET data streams is transmitted

The combination of Pierson and Stephenson does not expressly call for: a single optical fiber

Kremer teaches: single optical fiber (col. 2 lines 39 to 67)

It would have been obvious to one of ordinary skill in the art at the time of the invention to add the single optical fiber of Kremer to SONET transmitter of Pierson in order to transmit SONET signal to another node.

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9. Claim 67-69 are rejected under 35 U.S.C. 103(a) as being unpatentable over Pierson (U.S. Patent No.: 6,487,198) in view of Stephenson (U.S. Patent No.: 5,081,654) further in view of Schmidt (U.S. Patent No.: 6,205,154)

Referring to claim 67, the combination of Pierson and Stephenson teach: the method of claim 65 and single SONET data stream

Pierson does not expressly call for: optical carry rate in accordance with the SONET standard.

Schmidt teaches: optical carry rate in accordance with the SONET standard per col. 3 lines 34 to 67

It would have been obvious to add the optical carry rate of the SONET standard Schmidt to the channelized SONET data stream of Pierson in order to be standards compliant and build a system which is inoperable with legacy SONET systems.

Referring to claim 68, the combination of Pierson and Stephenson teaches: the device of claim 65 and POS tributary data streams

The combination of Pierson and Stephenson do not expressly call for: optical carry rate in accordance with the SONET standard.

Schmidt teaches: optical carry rate in accordance with the SONET standard per col. 3 lines 34 to 67

It would have been obvious to add the optical carry rate of the SONET standard of Schmidt to the to the POS tributary data of the combination Pierson and Stephenson in order to be standards compliant and build a system which is inoperable with legacy SONET systems.

Referring to claim 69, the combination of Pierson and Stephenson teaches: the method of claim 65 and ATM tributary data streams

The combination of Pierson and Stephenson does not expressly call for: optical carry rate in accordance with the SONET standard.

Schmidt teaches: optical carry rate in accordance with the SONET standard per col. 3 lines 34 to 67

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It would have been obvious to add the optical carry rate of the SONET standard Schmidt to the ATM tributary data stream of the combination of Pierson and Stepheson in order to be standards compliant and build a system which is inoperable with legacy SONET systems.

In addition Pierson teaches:

Regarding claim 64, wherein the simultaneously received tributary data streams additionally include a composite tributary stream that includes a POS tributary data stream and ATM data stream (The reference teaches ATM cells which had both HDLC and DS) or a composite in the same SONET stream or a composite tributary per col. 10 lines 33 to col. 12 lines 49. & per col. 12 lines 29 to 49

Claim Rejections - 35 USC § 101

10. 35 U.S.C. 101 reads as follows:

Whoever invents or discovers any new and useful process, machine, manufacture, or composition of matter, or any new and useful improvement thereof, may obtain a patent therefor, subject to the conditions and requirements of this title.

11. Claims 65-69 are rejected under 35 U.S.C. 101 because the claimed invention is directed to non-statutory subject matter.

Referring to claim 65, claim 65 is directed to a method creating and sending a signal. In order to be statutory a significant step of the method must be performed by physical structure or a physical transformation must be performed. The examiner has not interpreted the transmission of a SONET data structure as a significant step consequently, this claim is non-statutory. None of the dependent claims correct this deficiency so they are also non-statutory.

Specification

12. The disclosure is objected to because of the following informalities: The examiner objects to the section of the specification in which the status of related applications are described because the applicant has stated that this application is a division of Patent 6,658,021 where the applicant has clearly amended the specification to add new matter which was previously not described in the parent application making this clearly a Continuation in part. The specification is further objected to because the applicant has claimed priority to the provisional specification

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again where the applicant has clearly added new matter and therefore is not entitled to the original priority date. Appropriate correction is required.

Drawings

12. The drawings are objected to under 37 CFR 1.83(a). The drawings must show every feature of the invention specified in the claims. Applicant's best drawing relative to this application shows a SONET MUX/DEMUX and Line card in Fig 4; however, none of the applicant drawings show the following: “channelized SONET data stream and tributary data streams simultaneously including packet over SONET tributary data stream and ATM tributary data” as specified in claim 46; “simultaneously receiving tributary data streams including packer over SONET and ATM tributary streams” and “combining the simultaneously received tributary data streams into a single SONET data stream” as specified in claim 53; “means for creating at least two simultaneous tributary synchronous optical network data streams including: packet over SONET tributary data stream an ATM tributary data stream” as specified in claim 59; and “constructing of packer over SONET’ constructing of ATM data stream, and combining the packet over SONET and ATM data stream into a single channelized SONET data stream” as specified in claim 65. Therefore, the claims 46, 53, 59, & 65 must be shown or the feature(s) canceled from the claim(s). No new matter should be entered.

Corrected drawing sheets in compliance with 37 CFR 1.121(d) are required in reply to the Office action to avoid abandonment of the application. Any amended replacement drawing sheet should include all of the figures appearing on the immediate prior version of the sheet, even if only one figure is being amended. The figure or figure number of an amended drawing should not be labeled as “amended.” If a drawing figure is to be canceled, the appropriate figure

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must be removed from the replacement sheet, and where necessary, the remaining figures must be renumbered and appropriate changes made to the brief description of the several views of the drawings for consistency. Additional replacement sheets may be necessary to show the renumbering of the remaining figures. Each drawing sheet submitted after the filing date of an application must be labeled in the top margin as either "Replacement Sheet" or "New Sheet" pursuant to 37 CFR 1.121(d). If the changes are not accepted by the examiner, the applicant will be notified and informed of any required corrective action in the next Office action. The objection to the drawings will not be held in abeyance.

Response to Amendment

13. Applicant's arguments filed 8/31/09 have been fully considered but they are not persuasive.

The examiner respectfully disagrees with the applicant argument that claims 61-64 were not rejected previously as a 103 rejection and therefore upon submission of a terminal disclaimer then the claims would be allowable. Clearly on Pgs 9-10 claims 61-64 were previously rejected under 103.

The examiner respectfully disagrees that the applicant has overcome the examiner objection that the specification should be a continuation in part and not a division as indicated in the related application section. In order to be a division of the parent the specification needs to be virtually the same. The specification in the instant application appears to be different from the parent application. The examiner is confused as to why the applicant would argue that portions of pages in the parent patent provided support for certain sections. The examiner asserts that because the applicant has not proven that the specification in the instant application is not virtually the same as the parent patent application that the applicant has failed the burden of proof that the instant application is a division.

The examiner respectfully disagrees with the applicant argument that the provisional application on Pg 184 shows packet over SONET in a tributary. On Pg 184 of the provisional application the virtual shows a big circle with a small circle with POS in the small circle. POS is not defined and there is no mention of tributary. No where in the drawing does applicant define tributary. No where in the drawing is POS defined as packet over SONET. No where in the drawing is simultaneous defined for sending both ATM in a tributary and packet over SONET in a tributary.

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The examiner respectfully disagrees with the applicant argument that the objection to the drawing has been traversed. Figures 3 and 7 are independent drawings. No where on either drawing is it stated that the POS and ATM simultaneously sent in two tributaries; consequently, applicant argument is not persuasive.

The examiner agrees that the revised drawings are of adequate quality to be in a published patent so the objection to the quality of the drawings has been traversed.

The examiner agrees that the objection to claims 67-69 has been traversed.

The examiner is confused relative to applicant argument that the original claim 46 supports priority back to the parent application. Claim 46 provides priority back to the filing date of this instant application.

The examiner disagrees with applicant's argument that the provisional application provided support for simultaneous including packet over SONET in a tributary and ATM in a tributary based upon Pg 184 of the provisional application. The words simultaneous, tributaries, and packet over SONET are never explained or defined on Pg 184 of the provisional application; therefore, applicant argument is not persuasive.

The examiner respectfully disagrees with the applicant's assertion that Pg 184 of the provisional application is being ignored because the examiner has not agreed to applicant assertion of priority. The examiner asserts that the because POS is never defined as packet over SONET and tributaries are never defined and simultaneous tributaries are never defined in the Figure that the applicant is not entitled to provisional application priority date for the limitation of "separate the channelized SONET data streams into constituent tributary data streams, the tributary data streams simultaneously including a packet over SONET tributary data stream and an asynchronous transfer mode tributary data stream

The examiner respectfully disagrees with the applicant's argument relative to claim 46 that the combination of reference do not teach: "separate the channelized SONET data stream into constituent tributary data streams. The applicant has not claimed that the POS tributary data stream and the ATM tributary data stream are two separate and independent tributary data streams which one tributary data stream only contains ATM and another tributary data stream contains POS.

Referring to claim 46, Pierson teaches: A device (Figure 6)

a demultiplexer configured to receive a synchronous optical network (SONET) data stream and separate SONET data stream into packet over SONET data stream and asynchronous transfer mode (ATM) data stream (SONET receiver per Fig 6 demultiplexes the synchronous optical data stream (601) into ATM cells which carries both DSOs and HDLC or ATM over SONET and packet over SONET simultaneously per col. 10 lines 33 to col. 12 lines 49. Please note that

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HDLC is described in detail per col. 12 lines 29 to 49) and a line card coupled to the demultiplexer (port on SONET receiver is interpreted as a line card per Fig 6)

Pierson does not expressly call for: separate the channelized synchronous optical data stream into a constituent tributary data stream and configured to provide the demultiplex with the channelized SONET data stream

Noh teaches: separate the channelized synchronous optical data stream into a constituent tributary data stream (SONET data stream is separated into a tributary which carried the ATM cell per col. 5 lines 65 to col. 6 line 19 and col. 6 line 63 to col. 7 line 5)

It would have been obvious to one of ordinary skill in the art at the time of the invention to add the separate the channelized synchronous optical data stream into a constituent tributary data stream and configured to provide the demultiplex with the channelized SONET data stream of Noh to the processing performed by the SONET Receiver of Pierson because by processing ATM cells with in VC the bandwidth utilized in transmitting and receiving the data is more efficiently utilized which will result in an improved performance

The limitation of “separate the channelized synchronous optical data stream into a constituent tributary data stream” does not require in the broadest interpretation that the POS and the ATM are in two independent tributaries and are separated. The claim only requires that the data in the channelized SONET in VCs be separated. Clearly the reference NOH performs this limitation.

The examiner disagrees with the applicant argument that the reference NOH need to teach: separating the ATM and STM traffic into separate and independent tributaries because applicant has not claimed this limitation. Pierson teaches: both ATM and Packet over SONET are in a SONET frame and NOH teaches the data can be inserted into VCs for more efficient utilization of bandwidth; therefore, the combination of reference teach the claimed invention. Clearly when the VC are demultiplexed then the POS and ATM are simultaneously received.

The examiner disagrees with the applicant argument that the reference NOH needs to teach: ATM VP cross-connect receiver a channelized SONET data stream and that the ATM VP cross-connect separates the VC3 into constituent data streams because this is not a claimed limitation.

The examiner disagrees with the applicant’s argument that the reference NOH needs to teach a demultiplexer configured to receive a channelized synchronous optical network data stream and separate the channelized SONET data stream into constituent tributary data streams the tributary data streams simultaneously including a packet over SONET (POS) tributary data stream and a synchronous transfer mode (ATM) tributary because the combination of reference teach this limitation.

The examiner respectfully disagrees with the applicant argument that the combination of reference do not teach: simultaneously received data streams into a single channelized synchronous optical network (SONET) data stream. Again it should be noted that the applicant

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has not claimed that the POS tributary data stream and the ATM tributary data stream are two separate and independent data streams in which one tributary only carries POS and the other independent tributary carries only ATM.

Referring to claim 53, Pierson teaches: one or more devices in a data processing environment (Fig 6 is the device) comprising:

A multiplexer configured to simultaneously received a packet over synchronous optical network (POS) data stream and a asynchronous transfer mode data stream (The SONET transmitter or multiplexer simultaneously receives an ATM cell which has two T1s comprising both DSOs and HDLC or both packet over SONET and ATM over SONET per Fig 6 and per col. 12 lines 50-67. It should be noted that HDLC is in slot 24 which is also sent per col. 12 lines 33 to 44)

And a line card coupled to the multiplexer and configure to receive the single channelized SONET data stream (A port on the SONET receiver is the line card which receives a single channelized SONET data stream per Fig 6 and per col. 12 lines 50-67)

Pierson does not expressly call for: combine the simultaneously received data streams into a single channelized synchronous optical network (SONET) data stream

Noh teaches: combine the simultaneously received data streams into a single channelized synchronous optical network (SONET) data stream (Fig 7A shows three VC3 or tributary streams which are simultaneously concatenated to create a single STM-1 or SONET single data stream per col. 6 lines 20 to 62 and col. 5 lie 54 to col. 6 line 19)

It would have been obvious to one of ordinary skill in the art at the time of the invention to add combine the simultaneously received data streams into a single channelized synchronous optical network (SONET) data stream of Noh to the processing of SONET transmitter of Pierson because by processing ATM cells with in VC the bandwidth utilized in transmitting and receiving the data is more efficiently utilized which will result in an improved performance

The examiner respectfully disagrees with the applicant's argument Pierson teaches away from the claimed invention because Pierson does not teach the whole claim limitation of 53. Applicant has failed the burden of providing specific evidence to the fact. More specifically the examiner disagrees that because Pierson teaches an ATM containing both T1s and HDLC which is converted into SONET that the this teaches away from the claimed invention. Noh teaches: combine the simultaneously received data streams into a single channelized synchronous optical network (SONET) data stream (Fig 7A shows three VC3 or tributary streams which are simultaneously concatenated to create a single STM-1 or SONET single data stream per col. 6 lines 20 to 62 and col. 5 lie 54 to col. 6 line 19)

It would have been obvious to one of ordinary skill in the art at the time of the invention to add combine the simultaneously received data streams into a single channelized synchronous optical network (SONET) data stream of Noh to the processing of SONET transmitter of Pierson

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because by processing ATM cells with in VC the bandwidth utilized in transmitting and receiving the data is more efficiently utilized which will result in an improved performance

Applicant goes on to state that the second reference Noh does not remedy the fact that Pierson teaches away from the claimed invention because Pierson does not teach: single channelized SONET data stream. Clearly the primary reference, Pierson, taught SONET with ATM and POS and the Noh teaches: demuxing VC3 with both ATM and POS which are multiplexed and further configured into a single channelized synchronous optical network SONET data stream or the claimed invention.

The examiner respectfully disagrees with the applicant argument that the implementation of the combination is inefficient is even relevant because efficiency is not part of the claimed limitation. Clearly the combination is not inefficient because the ATM and POS are already in SONET together and per Pierson and Noh breaks the combination into VC3 in order to better utilize the bandwidth request.

The examiner disagrees with the applicant argue that the reference Noh need to teach that the tributaries of concatenated mode includes POS and ATM. Clearly from the above argument Pierson teaches the POS and ATM are concatenated.

The examiner respectfully disagrees with the applicant argument that the combination of reference do not teach the claimed limitation. Since this is repeating the same response the examiner recommend referring to the above rejection.

The examiner respectfully disagrees with the applicant argument that the rejection is a mere conclusory statement because the examiner has not explained how the two reference are combined and that the combination is inefficient. The examiner has explained in the above rejection how to combine the two reference to implement the claimed invention and the motivation to combine is proper therefore the rejection is not a mere conclusory statement.

The examiner disagrees with the applicant argument that the combination of references do not teach: Means for transmitting a single SONET data stream or at least two simultaneous tributary streams in a single SONET data stream. Again it should be noted that the applicant has not claimed that the POS tributary data stream and the ATM tributary data stream are two separate and independent tributary data streams which one tributary data stream only contains ATM and another tributary data stream contains POS.

Referring to claim 59, Pierson teaches: forwarding node for directing data in a network (Figure 6) the forwarding node including:

A means for creating single synchronous optical network data stream including a packet over synchronous optical data stream and an asynchronous transfer mode (ATM) tributary data stream (SONET transmitter per Fig 6 creates a single SONET data stream including data in atm cell

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over SONET and HDLC in ATM cell over SONET or packet over SONET pr col. 12 lines 50 to 67 and per col. 12 lines 33 to 44)

Means for transmitting a single SONET data stream (SONET transmitter per Fig 6 and col. 12 lines 50-67)

Pierson does not expressly call for: at least two simultaneous tributary streams in a single SONET data stream

Noh teaches: at least two simultaneous tributary streams in a single SONET data stream (Fig 7A shows three VC3 or tributary streams which are simultaneously concatenated to create a single STM-1 or SONET single data stream per col. 6 lines 20 to 62 and col. 5 line 54 to col. 6 line 19)

It would have been obvious to one of ordinary skill in the art at the time of the invention to add at least two simultaneous tributary streams of Noh to the processing of SONET transmitter of Pierson because by processing ATM cells with in VC the bandwidth utilized in transmitting and receiving the data is more efficiently utilized which will result in an improved performance. Combining the at least two simultaneous tributary streams in to the SONET transmitter would result in having a means for transmitting at least two simultaneous tributary streams which include both packet over SONET and ATM over SONET and would also result in the transmitting means for transmitting at least two simultaneous tributary SONET data streams in a single SONET data stream.

The examiner respectfully disagrees with the applicant argument that the claim is broken into illogical portions and breaking the claim into portions is impermissible because the examiner has not treated the claim as a whole. The examiner respects the applicant right to their opinion but applicant has not met the burden required to prove that the claim was not treated as a whole. The examiner asserts that the claim was considered as a whole and was rejected using a combination of reference in a 103 rejection with a proper motivation to combine; thus, the rejection is proper.

The examiner respectfully disagrees with the combination of reference teach away from the claimed invention. Applicant has failed the burden to specifically provide evidence that teaches away from the claimed invention.

The examiner respectfully disagrees with the applicant argument that the Noh needs to teach: means for transmitting the at least two simultaneous tributary data streams including packet over synchronous optical network (POS) tributary data stream and an asynchronous transfer mode. The combination of reference teach: means for transmitting the at least two simultaneous tributary data streams including packet over synchronous optical network (POS) tributary data stream and an asynchronous transfer mode of the claimed invention as explained above.

The examiner respectfully disagrees with the applicant's argument that the Noh teaching that the configuration is not efficient is relevant because applicant has not claimed the efficiency in the claim limitations.

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The examiner respectfully disagrees that Noh needs to teach: tributaries of the concatenated mode includes packet over synchronous optical network (POS) tributary data stream, and an asynchronous transfer mode (ATM) tributary data stream because the combination of reference teach this limitation.

The examiner respectfully disagrees with applicant's argument that the motivation to combine Pierson and Noh is improper. Clearly the motivation is understandable and reasonable and therefore is not improper.

The examiner respectfully disagrees with the applicant argument that the rejection is a mere conclusory statement. The examiner respects the applicant right to their opinion but applicant has not met the burden required to prove that the claim was rejected based upon a mere conclusory statement. . The examiner asserts that the claim was considered as a whole and was rejected using a combination of reference in a 103 rejection with a proper motivation to combine; thus, the rejection is proper and not conclusory.

The examiner respectfully disagrees with the applicant argument that the implementation of the combination is inefficient is even relevant because efficiency is not part of the claimed limitation. Clearly the combination is not inefficient because the ATM and POS are already in SONET together and per Pierson and Noh breaks the combination into VC3 in order to better utilize the bandwidth request

The examiner disagrees with the applicant argument relative to the independent claims that the 103 rejection has been traversed. Applicant essentially argues the same argument as previously cited above associated with the independent claim and argues that the secondary reference does not correct the deficiencies and therefore is allowable. The examiner has already explained that the rejection for the independent claims is proper and therefore in order to be concise the examiner will not repeat the above argument.

The examiner has added an additional reference to the rejection of claim 65 in order to clarify the rejection.

The examiner agrees with the applicant argument that the obvious double patenting rejection has been traversed because the terminal disclaimer submitted has been reviewed and approved.

Conclusion

14. Any inquiry concerning this communication or earlier communications from the examiner should be directed to ROBERT W. WILSON whose telephone number is (571)272-3075. The examiner can normally be reached on M-F (8:00-4:30).

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If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Dang Ton can be reached on 571/272-3171. The fax phone number for the organization where this application or proceeding is assigned is 571-273-8300.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free). If you would like assistance from a USPTO Customer Service Representative or access to the automated information system, call 800-786-9199 (IN USA OR CANADA) or 571-272-1000.

/Robert W Wilson/
Primary Examiner, Art Unit 2475

RWW
12/11/09